

CURRICULUM VITAE

Martha S. Nizinski

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EDUCATION

B.S. 1983. West Virginia Wesleyan College. Degree in Biology with a second major in Chemistry. Graduated Magna Cum Laude.

M.S. 1986. University of Maryland, Department of Zoology. Degree in Zoology.
Thesis Title: The ecology and social behavior of *Periclimenes anthophilus*, a symbiotic cleaner shrimp.

Ph.D. 1998. The College of William and Mary, Virginia Institute of Marine Science. Degree in Marine Science. Dissertation Title: Caribbean spiny lobster and their molluscan prey: Are top-down forces key in structuring prey assemblages in a Florida Bay seagrass system?

PROFESSIONAL EMPLOYMENT

Zoologist. February 2002-Present. National Marine Fisheries Service, National Systematics Laboratory, Washington, D.C. (part-time status). Conduct original research and maintain active research program on biodiversity, ecology and systematics of selected groups of commercially and ecologically important marine crustaceans, molluscs and fishes.

Zoologist. October 1998-February 2002. National Marine Fisheries Service, National Systematics Laboratory, Washington, D.C. (intermittent status). Conduct original research and maintain active research program on biodiversity, ecology and systematics of selected groups of commercially and ecologically important marine crustaceans, molluscs and fishes. Additional duties included serving as assistant to director of VIMS Cooperative Marine Education and Research Program.

Zoologist. May 1991-September 1998. National Marine Fisheries Service, National Systematics Laboratory, Washington, D.C. (on intermittent status). Continued work on various projects while a full-time graduate student at the Virginia Institute of Marine Science, School of Marine Science, College of William and Mary. See below for details of position responsibilities.

PROFESSIONAL EMPLOYMENT (Continued)

Zoologist. August 1989-May 1991. National Marine Fisheries Service, National Systematics Laboratory, Washington, D.C. Responsible for all phases of taxonomic research on selected groups of commercially and ecologically important marine fishes and invertebrates including planning and implementing the study, obtaining specimens for examination either by loan or collection, x-raying and clearing and staining specimens, conducting literature searches, making counts and measurements, analyzing data, summarizing geographic and ecological information, and writing manuscripts for publication and presentation at scientific meetings. Additionally, review and edit manuscripts, prepare charts and maps, and perform routine curatorial duties associated with systematic studies conducted in a museum environment.

Museum Technician, Zoology. May 1987-August 1989. National Marine Fisheries Service, National Systematics Laboratory, Washington, D.C. Assisted in ongoing taxonomic studies particularly those relating to fishes. Collected data by making counts and measurements on fresh and preserved specimens as well as on radiographs; performed statistical analyses, prepared graphs and maps; and conducted literature searches. Additionally, was given projects which incorporated all aspects of scientific research including collecting and analyzing data and preparing manuscripts for publication. Also performed a wide range of technical duties in connection with systematic research including curation and management of collections, collection of specimens, x-raying and clearing and staining of specimens, sorting collections and identifying the specimens, and preparing maps and graphs.

Museum Technician, Fishes. November 1986-May 1987. Smithsonian Institution, Division of Fishes, Washington, D.C. Majority of duties dealt with the cataloging and loan of specimens. Cataloging entailed data entry of taxonomic and geographic information, proofing files, correcting taxonomic and specimen status changes, making labels and manipulating data. Loan activities included preparation of invoices and packing specimens for researchers in other institutions; unpacking and preparing specimens for the collection which were being returned; corresponding with various researchers to answer questions with regard to the collection material; and data entry. Additionally, was in charge of budgeting for and purchasing supplies for the division as well as the department of vertebrate zoology. Other duties included: inventory of equipment, collection maintenance, sorting of collections, packing for field trips, identification of specimens, and general maintenance.

Museum Technician, Inventory. May 1986-November 1986. Smithsonian Institution, Division of Fishes, Washington, D.C. Responsible for taking inventory of the fish collection in the National Museum of Natural History. Majority of work involved data entry of taxonomic, ledger, and geographic information, locality and collection data, and number of specimens using DBASE III computer programs. Other duties included cataloging older lots of fishes, which involved gathering information from labels and entering that data into the computer; running computer programs dealing with geographic and ledger information, converting DBASE files to SELGEM; and correcting taxonomic name changes on previously cataloged material in the ledger and fish master files as well as the labels on the jar. Also assisted with the maintenance of the museum collection which entailed re-alcoholing specimen jars, replacing jars which are no longer suitable, printing and placing labels in jars, and reorganizing the collection.

RESEARCH GRANTS, HONORS AND AWARDS

- 2005. Co-Principal Investigator, NOAA Office of Ocean Exploration Research Grant entitled: Continental Slope Coral Banks of the Southeastern United States: Exploring the distributions, ecology, and biology of deep coral habitats and associated fauna.
- 2005. Invited Collaborator, USGS Outer Continental Shelf Studies Program Deep Reef Investigations Project Grant entitled: *Lophelia* reef fish and mobile megafauna community structure, biotope affinities, and trophodynamics.
- 2004. Research Associate, National Museum of Natural History, Smithsonian Institution, Washington, DC.
- 2004. Co-Principal Investigator, NOAA Office of Ocean Exploration Research Grant entitled: Exploration of Unique Outer Shelf and Slope "Reef" Habitats off the Southeastern United States.
- 2004. Co-Principal Investigator, USGS Outer Continental Shelf Studies Program Deep Reef Investigations Project Grant entitled: *Lophelia* reef fish and mobile megafauna community structure, biotope affinities, and trophodynamics.
- 2003. Co-Principal Investigator, NOAA Office of Ocean Exploration Research Grant entitled: Exploration of unique outer shelf and slope reef habitats off the Carolinas (South Atlantic Bight).
- 1991-1994. College of William and Mary, School of Marine Science Graduate Student Fellowship.
- 1990. Honorable Mention for Best Paper in *Fishery Bulletin* for Volume 88.
- 1985. Sigma Xi Grants-in-Aid of Research.
- 1985. Lerner Gray Fund for Marine Research.
- 1985. Sydney L. Wright Fellowship, Bermuda Biological Station.
- 1984. Thesis Research Grant, Department of Zoology, University of Maryland.

PUBLICATIONS

- 2003. NIZINSKI, M.S. Annotated checklist of decapod crustaceans of Atlantic coastal and continental shelf waters of the United States. *Proceedings of the Biological Society of Washington*. 116(1):96-157.
- 2002. NIZINSKI, M.S., and T.A. Munroe. Family Engraulidae. Pp. 764-794. *In: The Living Marine Resources of the Western Central Atlantic* (K.E. Carpenter, ed.). Vol. 2. Bony fishes part 1 (Acipenseridae to Grammatidae). FAO Species Identification Guide for Fishery Purposes and American Society of Ichthyologists and Herpetologists Special Publication Number 5. FAO, Rome.
- 2002. Munroe, T.A., and M.S. NIZINSKI. Family Clupeidae. Pp. 804-830. *In: The Living Marine Resources of the Western Central Atlantic* (K.E. Carpenter, ed.). Vol. 2. Bony fishes part 1 (Acipenseridae to Grammatidae). FAO Species Identification Guide for Fishery Purposes and American Society of Ichthyologists and Herpetologists Special Publication Number 5. FAO, Rome.

PUBLICATIONS
(Continued)

2000. Munroe, T.A., T. Wongratana, and M.S. NIZINSKI. Family Clupeidae. p. 1775-1821. *In: K.E. Carpenter and V.H. Niem, eds. FAO Species Identification Guide for Fishery Purposes. The Living Marine Resources of the Western Central Pacific. Volume 3. Batoid fishes, chimaeras and bony fishes part 1 (Elopidae to Linophrynidae).* FAO, Rome.
2000. Munroe, T.A., M.S. NIZINSKI, and T. Wongratana. Family Pristigasteridae. p. 1754-1770. *In: K.E. Carpenter and V.H. Niem, eds. FAO Species Identification Guide for Fishery Purposes. The Living Marine Resources of the Western Central Pacific. Volume 3. Batoid fishes, chimaeras and bony fishes part 1 (Elopidae to Linophrynidae).* FAO, Rome.
2000. Munroe, T.A., M.S. NIZINSKI, and T. Wongratana. Family Chirocentridae. p. 1771-1774. *In: K.E. Carpenter and V.H. Niem, eds. FAO Species Identification Guide for Fishery Purposes. The Living Marine Resources of the Western Central Pacific. Volume 3. Batoid fishes, chimaeras and bony fishes part 1 (Elopidae to Linophrynidae).* FAO, Rome.
2000. Wongratana, T., T.A. Munroe, and M.S. NIZINSKI. Family Engraulididae. p. 1698-1753. *In: K.E. Carpenter and V.H. Niem, eds. FAO Species Identification Guide for Fishery Purposes. The Living Marine Resources of the Western Central Pacific. Volume 3. Batoid fishes, chimaeras and bony fishes part 1 (Elopidae to Linophrynidae).* FAO, Rome.
2000. Munroe, T.A., and M.S. NIZINSKI. Clupeiformes. p. 587-588. *In: J.E. Randall and K.K.P. Lim, eds. A checklist of the fishes of the South China Sea. The Raffles Bulletin of Zoology, Supplement No. 8:569-667.*
1992. Collette, B.B., N.V. Parin, and M.S. NIZINSKI. Catalog of type specimens of recent fishes in the National Museum of Natural History, Smithsonian Institution. 3: Beloniformes (Teleostei). *Smithsonian Contributions to Zoology*, No. 525, 16 pages.
1991. Munroe, T.A., M.S. NIZINSKI, and M.N. Mahadeva. *Symphurus prolatinaris*, a new species of shallow-water tonguefish (Pleuronectiformes: Cynoglossidae) from the eastern Pacific. *Proceedings of the Biological Society of Washington* 104:448-458.
1990. NIZINSKI, M.S., B.B. Collette, and B.B. Washington. Separation of two species of sand lances, *Ammodytes americanus* and *A. dubius*, in the western North Atlantic. *Fishery Bulletin, U.S.* 88:241-255.
1990. Munroe, T.A. and M.S. NIZINSKI. *Symphurus melasmatotheca* and *S. undecimplerus* (Cynoglossidae, Pleuronectiformes), two new eastern Pacific tonguefishes possessing 11 caudal-fin rays. *Copeia* 1990(4):985-996.
1989. NIZINSKI, M.S. Ecological distribution, demography, and behavioral observations on *Periclimenes anthophilus*, an atypical symbiotic cleaner shrimp. *Bulletin of Marine Science* 45(1):174-188.
1986. NIZINSKI, M.S. The ecology and social behavior of *Periclimenes anthophilus*, a symbiotic cleaner shrimp. *American Zoologist* 26(4):37A.

BOOK CHAPTER

2002. NIZINSKI, M.S. Sand lances. Family Ammodytidae. Pp. 496-505. *In*: Bigelow and Schroeder's Fishes of the Gulf of Maine. 3rd edition (B.B. Collette and G. Klein-MacPhee, eds.). Smithsonian Institution Press, Washington, DC.

MANUSCRIPTS ACCEPTED

- NIZINSKI, M.S. Lobsters. General Introduction. *In*: K.E. Carpenter, ed. The Living Marine Resources of the Eastern Central Atlantic. FAO Species Identification Guide for Fishery Purposes. FAO, Rome.
- NIZINSKI, M.S. Family Nephropidae. *In*: K.E. Carpenter, ed. The Living Marine Resources of the Eastern Central Atlantic. FAO Species Identification Guide for Fishery Purposes. FAO, Rome.
- NIZINSKI, M.S. Family Palinuridae. *In*: K.E. Carpenter, ed. The Living Marine Resources of the Eastern Central Atlantic. FAO Species Identification Guide for Fishery Purposes. FAO, Rome.
- NIZINSKI, M.S. Family Scyllaridae. *In*: K.E. Carpenter, ed. The Living Marine Resources of the Eastern Central Atlantic. FAO Species Identification Guide for Fishery Purposes. FAO, Rome.
- NIZINSKI, M.S. Family Ammodytidae. *In*: K.E. Carpenter, ed. The Living Marine Resources of the Eastern Central Atlantic. FAO Species Identification Guide for Fishery Purposes. FAO, Rome.
- NIZINSKI, M.S. and T.A. Munroe. Family Engraulidae. *In*: K.E. Carpenter, ed. The Living Marine Resources of the Eastern Central Atlantic. FAO Species Identification Guide for Fishery Purposes. FAO, Rome.

MANUSCRIPTS SUBMITTED

- Brooks, R.A., M.S. NIZINSKI, S.W. Ross, and K.J. Sulak. Sublethal injury rate in a deepwater ophiuroid, *Ophiacantha bidentata*, an important component of western Atlantic *Lophelia* reef communities. In review. Submitted to *Marine Biology*.
- Ross, S.W., and M.S. NIZINSKI. State of the deep sea coral ecosystems in the United States: Regional chapter for the southeastern United States (Cape Hatteras to southeastern Florida). In review. Submitted to NOAA Technical Memorandum Series.
- NIZINSKI, M.S. Predation in subtropical soft-bottom systems: the example of spiny lobster and molluscs in Florida Bay. In revision. Submitted to *Marine Ecology Progress Series*.

MANUSCRIPTS IN PREPARATION

- NIZINSKI, M.S., S.W. Ross and K.J. Sulak. Predatory activities of the deep-water galatheid, *Eumunida picta* (Decapoda: Chirostylidae), inhabiting *Lophelia* banks on the continental slope off North Carolina.
- Henry, L.A., M.S. NIZINSKI, and S.W. Ross. Biodiversity and biogeography of the hydroid fauna from US South Atlantic deep-water coral reefs.
- NIZINSKI, M.S. Temporal and spatial distributions of the gastropod and bivalve mollusc assemblage in Florida Bay seagrass habitats.
- NIZINSKI, M.S., S.W. Ross and K.J. Sulak. The decapod crustacean fauna associated with deep-water *Lophelia* banks in the South Atlantic Bight, USA.
- Gerdes, P. and M.S. NIZINSKI. New crustacean records for Chesapeake Bay, with notes on distribution, abundance, and seasonality.
- NIZINSKI, M.S. and V. Guida. New crustacean records for outer continental shelf habitats in the Mid-Atlantic Bight.

PAPERS PRESENTED AT PROFESSIONAL MEETINGS

2005. Habitat utilization and species-specific associations between galatheids and deepwater corals off the southeastern United States (with S.W. Ross and K.J. Sulak). Third International Symposium on Deep-Sea Corals, Miami, FL.
2005. Southeastern U.S. deep sea corals initiative (SEADESC): Characterizing known locations of habitat-forming deep sea corals in the South Atlantic Bight (with T. Birdsong, J. McDonough, J. Potter, S.W. Ross, G. Sedberry, and A. Shepard). Third International Symposium on Deep-Sea Corals, Miami, FL.
2005. Habitat utilization and species-specific associations between galatheids and deepwater corals off the southeastern United States (with S.W. Ross and K.J. Sulak). Sixth International Crustacean Congress, Glasgow, Scotland.
2004. Macrofaunal structure and habitat utilization within deep coral bank communities on the southeastern United States slope (with S.W. Ross and K.J. Sulak). International Council for Exploration of the Sea, Annual Science Conference, Vigo, Spain.
2004. *Lophelia pertusa* landscapes and megafaunal biotopes on the Blake Plateau off the southeastern United States (with S.W. Ross and K.J. Sulak). International Council for the Exploration of the Sea, Annual Science Conference, Vigo, Spain.
2004. Deep coral bank fishes on the southeastern United States Slope: Is there a deep water primary reef ichthyofauna? (with S.W. Ross and K.J. Sulak), European Congress of Ichthyology. Tallinn, Estonia.
2004. Preliminary observations on diversity of invertebrate fauna associated with *Lophelia* banks off North Carolina (with S.W. Ross and K.J. Sulak). National Marine Fisheries Service, Northeast Fisheries Science Center Eighth Science Symposium, Atlantic City, NJ.
2004. Preliminary observations on diversity of invertebrate fauna associated with *Lophelia* banks off North Carolina (with S.W. Ross and K.J. Sulak). American Geophysical Union, Ocean Sciences Meeting, Portland, OR.

PAPERS PRESENTED AT PROFESSIONAL MEETINGS
(Continued)

2003. Preliminary observations on species composition and distributional ecology of galatheids and brachyurans from *Lophelia* banks off North Carolina (with S.W. Ross and K.J. Sulak). Second International Symposium on Deep-Sea Corals, Erlangen, Germany.
2003. Ichthyofauna of deep coral banks on the continental slope off the southeastern United States (with S.W. Ross and K.J. Sulak). Second International Symposium on Deep-Sea Corals, Erlangen, Germany.
2003. Preliminary observations on species composition and distributional ecology of galatheids from *Lophelia* banks off North Carolina (with S.W. Ross and K.J. Sulak). The Crustacean Society Summer Meeting, Williamsburg, VA.
2001. Reassessing biodiversity estimates for decapod crustaceans off the eastern United States: the importance of new species discoveries, improved taxonomy and new phylogenetic hypotheses. National Marine Fisheries Service, Northeast Fisheries Science Center Seventh Science Symposium, Westbrook, CT.
1993. The role of predation in structuring the macrobenthic community associated with casitas in Exuma Sound, Bahamas (with D.B. Eggleston and R.N. Lipcius). Annual Marine Benthic Ecology Meeting, Mystic, CT.
1992. Revision of Indo-Pacific tonguefishes of the genus *Symphurus* (with T.A. Munroe). Annual meeting, American Society of Ichthyologists and Herpetologist, Austin, TX.
1991. Three new species of symphurine tonguefishes from tropical waters of the Eastern Pacific (*Symphurus*: Cynoglossidae, Pleuronectiformes). National Marine Fisheries Service, Northeast Fisheries Science Center Fifth Science Symposium, Woods Hole, MA.
1988. Ecological distribution, demography, and behavioral observations on *Periclimenes anthophilus*, an atypical symbiotic cleaner shrimp. National Marine Fisheries Service, Northeast Fisheries Science Center Science Symposium, Pt. Judith, RI.
1986. The ecology and social behavior of *Periclimenes anthophilus*, a symbiotic cleaner shrimp. Annual Meeting of the American Society of Zoologists, Nashville, TN.

POSTER PRESENTED AT PROFESSIONAL MEETING

2005. Sublethal injury rate in a deepwater ophiuroid, *Ophiacantha bidentata*, an important component of western Atlantic *Lophelia* reef communities (with R.A. Brooks, S.W. Ross, and K.J. Sulak). Third International Symposium on Deep-Sea Corals, Miami, FL.
2003. Reassessing biodiversity estimates for decapod crustaceans off the eastern United States: The importance of new species discoveries, improved taxonomy, and new phylogenetic hypotheses. The Crustacean Society Summer Meeting, Williamsburg, VA.

INVITED LECTURES

- 1996. Topic: Spiny lobster life history and ecology and the effects of disturbance on macrobenthic community structure. Scientific, educational, and public relations staff, Delaware Museum of Natural History, Wilmington, DE.
- 1995. Topic: Overview of spiny lobster biology research in the Florida Keys and Bahamas. Departments of Biology and Ecology, University of Ottawa, Ottawa, Canada.
- 1995. Topic: Overview of spiny lobster ecology in Florida Bay. Department of Zoology, National University of Singapore.

PROFESSIONAL AFFILIATIONS

The Crustacean Society
Biological Society of Washington
The Ecological Society of America
Phi Kappa Phi
Senate of Scientists, Smithsonian Institution
Research Associate, Smithsonian Institution

FIELD RESEARCH HIGHLIGHTS

- 2005. **Co-Principal Investigator and Invertebrate Specialist.** Participated in 18-day NOAA OE *Life on the Edge 2005* Research Cruise exploring unique continental slope reef habitats of South Atlantic Bight using manned submersible (Johnson Sea Link). Responsible for all invertebrate collections, identification, and curation; wet lab manager.
- 2005. **Invited Collaborator and Invertebrate Specialist.** Participated in 5-day USGS/MMS research cruise exploring deep-water coral habitats in the Gulf of Mexico using manned submersible (Johnson Sea Link). Responsible for all invertebrate collections and curation, and identification of crustaceans; wet lab manager.
- 2004. Conducted museum research on eastern Atlantic lobsters curated in collections of Muséum national d'Histoire naturelle in Paris, France.
- 2004. **Co-Principal Investigator and Invertebrate Specialist.** Participated in 14-day NOAA OE *Life on the Edge II* Research Cruise exploring unique continental slope reef habitats of South Atlantic Bight using manned submersible (Johnson Sea Link). Responsible for all invertebrate collections, identification, and curation; wet lab manager.

FIELD RESEARCH HIGHLIGHTS
(Continued)

2004. **Co-Principal Investigator and Invertebrate Specialist.** Participated in 6-day USGS/MMS research cruise exploring deep-water coral habitats in the Gulf of Mexico using manned submersible (Johnson Sea Link). Responsible for all invertebrate collections, identification, and curation; wet lab manager.
2004. **Systematic zoologist** in 6-day international biodiversity workshop held in Tenerife, Canary Islands, Spain. Purpose of workshop: to prepare FAO East Central Atlantic Identification sheets for living marine resources. Taxonomic keys were written, revised, and field tested and literature and collections analyzed for biogeographic information.
2003. **Co-Principal Investigator and Invertebrate Specialist.** Participated in 12-day NOAA OE *Life on the Edge* Research Cruise exploring unique outer shelf and slope reef habitats off the Carolinas (South Atlantic Bight) using manned submersible (Johnson Sea Link). Responsible for all invertebrate collections, identification, and curation; wet lab manager.
2003. **Invertebrate Specialist.** Invited participant in 9-day research cruise sponsored by USGS studying invertebrate and finfish fauna associated with deep-water hard grounds in the eastern Gulf of Mexico (K.J. Sulak, Chief Scientist) using ROV.
2002. **Invertebrate Specialist.** Conducted systematic research on deep-water decapods at the North Carolina Estuarine Research Reserve, Wilmington, NC.
2002. **Invertebrate Specialist.** Participated in a 10-day NOAA OE *Islands in the Stream* Research Cruise exploring unique outer shelf and slope reef habitats off the Carolinas (South Atlantic Bight) using manned submersible (Johnson Sea Link).
2001. **Systematic Zoologist** during two-week cruise aboard NOAA R/V ALBATROSS IV. Research objective: participation in Groundfish Survey, Woods Hole, MA, southward to Cape Hatteras, NC.
1996. **Chief Scientist** during two-week expedition to Cat Island and Eleuthra Island, Bahamas. Research objective: continuation of VIMS ongoing research involving Caribbean spiny lobster recruitment and population dynamics in Exuma Sound. Research included visual census of juvenile and adult spiny lobster and habitat assessments.
1995. **Systematic zoologist** in 11-day international biodiversity workshop held in Quezon City, Philippines. Purpose of workshop: to prepare FAO West Central Pacific Identification sheets for living marine resources. Taxonomic keys were written, revised, and field tested and literature and collections analyzed for biogeographic information. Sponsors: FAO, ICLARM, University of the Philippines.
1995. **Chief Scientist** during two, three-week, expeditions to Long Key, Florida. Research objective: continuation of ongoing research involving Caribbean spiny lobster and monitoring of manipulative experiments examining effects of disturbance on macrobenthic community structure. Experiments were basis of dissertation work and included visual survey of macrobenthic invertebrates and finfishes associated with casita systems, suction sampling to collect invertebrates, habitat assessments and predator-prey experiments.
1995. **Chief Scientist** during two-week expedition to Cat Island, Bahamas. Research objective: continuation of VIMS ongoing research involving Caribbean spiny lobster recruitment and population dynamics in Exuma Sound. Research included visual census of juvenile and adult spiny lobster and Nassau grouper, tethering experiments, and fecundity estimates.

FIELD RESEARCH HIGHLIGHTS
(Continued)

1994. **Chief Scientist** during four expeditions (three, two-week trips and a one-month trip) to Long Key, Florida. Research objective: continuation of ongoing research involving Caribbean spiny lobster and monitoring of manipulative experiments examining effects of disturbance on macrobenthic community structure. Experiments were basis of dissertation work. Research included visual survey of macrobenthic invertebrates and finfishes associated with casita systems, benthic suction sampling to collect invertebrates, habitat assessments and predator-prey experiments.
1994. **Chief Scientist** during two-week expedition to Exuma Cays, Bahamas. Research objective: continuation of VIMS ongoing research involving Caribbean spiny lobster recruitment and population dynamics in Exuma Sound. Research included habitat assessments and search for nursery habitat, visual census of juvenile and adult spiny lobster, sampling of spiny lobster postlarvae and plankton sampling.
1993. **Chief Scientist** during four expeditions (three, two-week trips and a one-month trip) to Long Key, Florida. Research objective: continuation of ongoing research involving Caribbean spiny lobster and deployment and monitoring of manipulative experiments examining effects of disturbance on macrobenthic community structure. Experiments were basis of dissertation work. Research included visual survey of macrobenthic invertebrates and finfishes associated with casita systems, benthic suction sampling to collect invertebrates, habitat assessments and predator-prey experiments.
1992. **Research Assistant** during one-month expedition to Long Key, Florida. Research objective: continuation of ongoing research involving Caribbean spiny lobster. Research included visual survey of macrobenthic invertebrates and finfishes associated with casita systems, and benthic suction sampling to determine lobster impact on macrobenthic community structure.
1991. **Research Assistant** during three-month expedition to Lee Stocking Island, Bahamas. Research objective: implementation of new initiatives and continuation of ongoing research involving Caribbean spiny lobster. Research included visual survey of macroinvertebrates and finfishes associated with casita systems; predator/prey experiments; benthic suction sampling to determine lobster impact on macrobenthos, monitoring of lobster postlarvae settlement; and recruitment dynamics of local spiny lobster population.
1990. **Zoologist** during 15-day international expedition to Tobago in conjunction with researchers from Smithsonian Institution and Ministry of Fisheries for Trinidad and Tobago. Research objective: faunal survey of various marine and freshwater habitats to examine biodiversity and biogeography of fishes from Tobago. Involved extensive SCUBA diving, usually two dives per day.
1988. **Systematic Zoologist** during one-month cruise aboard NOAA R/V ALBATROSS IV. Research objective: participation in Groundfish Survey, Woods Hole, MA, southward to Cape Hatteras, NC.
1987. **Systematic Zoologist** during two-week cruise aboard NOAA R/V DELAWARE II. Research objective: participation in Groundfish Survey, Gulf of Maine.

FIELD RESEARCH HIGHLIGHTS (Continued)

1985. **Master's Thesis Research**, Bermuda Biological Station. Research objective: study ecology and behavior of *Periclimenes anthophilus*, a symbiotic cleaner shrimp. Involved both field (approximately 60 hrs underwater) and laboratory (approximately 70 hrs) experimentation and observation. Field work, which required SCUBA, included T-square sampling (a pattern analysis technique), collection of specimens, a fish census, and habitat description. Laboratory experimentation included analysis of movement patterns and intraspecific interactions of natural aggregations of shrimps and manipulation of some groups to determine if shrimps can recognize individuals.
1984. **Student Volunteer**, Bermuda Biological Station. Research objective: fish predation on stomatopods. Involved collection of specimens and testing of various experimental designs in predation experiments.
1983. **Field Assistant**, St. Croix, USVI. Research objective: analysis of coral reef community structure along a 100-foot depth gradient. Involved quadrat sampling, preparation of substrate maps, and data analyses.

ACTIVITIES AT PROFESSIONAL MEETINGS

2004. Session chair at the European Congress of Ichthyology held in Tallinn, Estonia.
2004. Session chair at National Marine Fisheries Service, Northeast Fisheries Science Center Eighth Science Symposium held in Atlantic City, NJ.
2003. Member of organizing committee, member of scientific program committee, organized a one-day symposium on ecology and systematics of deep-water crustaceans, chaired two sessions, and presented one paper and one poster at the international summer meeting of the Crustacean Society held in Williamsburg, VA.

TEACHING EXPERIENCE

- Intern Advisor.** Summer 2003. Served as advisor for NMFS undergraduate minority intern who assisted with samples collected to examine molluscan biodiversity in Florida Bay.
- Graduate Teaching Assistant.** August-December 1997. Virginia Institute of Marine Science, College of William and Mary. Graduate level course in Scientific and Statistical Methods for first-year graduate students. Delivered lectures, designed laboratory exercises, coordinated laboratory, lecture, and homework assignments, provided tutoring, and corrected exams and homework exercises.
- Guest Lecturer.** May 1994. Virginia Institute of Marine Science, College of William and Mary. Graduate level course in Experimental and Quantitative Ecology. Topic: Species diversity, diversity indices, and community structure.
- Graduate Teaching Assistant.** August 1983-May 1986. University of Maryland, Department of Zoology, College Park, MD. Taught laboratory sections for undergraduate courses in Introductory Zoology, Animal Diversity, and Life in the Ocean. Included lecturing, laboratory instruction, tutoring, and exam preparation and correction.